IV. REMARKS

In the Office Action, Claims 1, 5 and 8 were rejected under 35 U.S.C. 102 as being anticipated by Wilkinson (US 6,381,286), and claim 2 was rejected under 35 U.S.C. 103 as being unpatentable over Wilkinson for reasons set forth in the Office Action.

Claims 3-4 and 6-7 were said to have allowable subject matter.

The following argument is presented to show patentable subject matter within the rejected claims, thereby to overcome the foregoing rejections.

Wilkinson relates to a transmitter including a Cartesian loop, as does also the present invention. The basic structure of the Cartesian loop with its integrators is well known. The Wilkinson invention, as well as the present invention, do not concern that basic structure.

The teaching in Wilkinson's loop is an arrangement for reducing DC offset at the inputs of the modulators. The DC offset is nulled as taught in Wilkinson at column 10, line 18, to column 11, line 38. It is noted that DC offset is not a signal. In fact, as disclosed by Wilkinson, the DC offset is measured when the signal is absent (col. 10 at line 55 to col. 11 at line 25).

Wilkinson's DC offset is nulled in the following way: In a period when the transmitting power amplifier is disabled, the deflection of both modulator input voltages from the desired value is measured. (The desired value is 0V when using +/- supply voltages.) The measuring is implemented by the circuits 300 and 302, each including an amplifier, and sample and hold circuits. During transmitting time slots the deflection, or the DC offset, is brought as inverted to the summing point 108 (correspondingly to 110), at which point also one of the transmitter input signals and the signal of the reverse branch of the loop are summed.

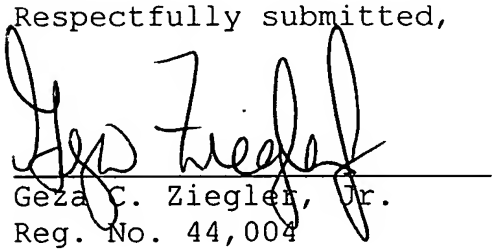
The Examiner fails to distinguish between Wilkinson's DC nulling and the control of the level of the modulator input signals in the present transmitter. A feature of the present invention is that the levels of the modulator input signals are measured, and the signal attenuation in a level control unit following the modulator is adjusted until the modulator input signal levels are suitable. This treatment of the signals is very much different than the Wilkinson DC nulling. Therefore, the Examiner's contention starting in the end of page 2 of the Office Action "the level of at least one input signal of the modulator is measured and compared to adjust tile level of' the attenuator" is traversed respectfully. In Wilkinson's transmitter, the level of the modulator input signals is not measured at all. (The term "signal level" has a different meaning than does the term "DC offset." For example, one can have a signal with high power associated with a high signal level, while the DC offset, often measured in volts, may be small.) Moreover, that quantity which is measured in Wilkinson's transmitter is not used to control any attenuation.

Also other functions in Wilkinson's transmitter, such as multi-stage control of the transmitting power and reducing the noise by filtering, are not a part of the present invention.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,



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